

95/00664)) labelled at the 5' end with digoxigenin to test the base specificity especially sensitively. Hybridisation was effected in 5 x SSC, 2% blocking reagent, 0.1% lauryl sarcosine, 0.02% SDS and 5 pmol/ml of probe for 4 hours at 60°C. Washing was carried out in 2 x SSC, 0.1% SDS for 2 x 15 minutes at 60°C. Detection was carried out according to standard methods using anti-digoxigenin/alkaline phosphate conjugates in the presence of 5-bromo-4-chloro-3-indolyl phosphate and 4-nitro-blue tetrazolium chloride (Boehringer Mannheim).

IN THE CLAIMS:

Kindly cancel claims 9, 15, 19, 23 and 27 without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents.

Kindly amend claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents to read as follows:

Sub E1
7. (Amended) A set of isolated nucleic acid molecules comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, and SEQ ID NO: 10 and the complement of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, and SEQ ID NO: 10, wherein said 10 contiguous nucleotides are 100% or at least 80% identical to a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, and SEQ ID NO: 10 and the complement of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, and SEQ ID NO: 10 and said nucleic acid sequences allows the detection of all representatives of *Salmonella enterica* subsp. *enterica*, *salamae*, *arizonae*, *diarizonae*, *houtenae*, *bongori* and *indica* by means of nucleic acid hybridisation or amplification.

Sub E2
D4
10. (Amended) The nucleic acid molecule according to claim 7, wherein each nucleotide sequence contains 10 to 250 nucleotides.

Sub E2
D5
12. (Amended) The set of isolated nucleic acid molecules according to claim 7, wherein said isolated nucleic acid sequence is present

- (i) as DNA, or
- (ii) as RNA corresponding to (i), or
- (iii) as PNA.

Sub E3
D6
16. (Amended) The kit according to claim 43, wherein the set of isolated nucleic acid molecules was produced synthetically and in at least two separate synthesis batches

D7
18. (Amended) A method of detecting the presence or absence of bacteria comprising the steps of : (i) using a kit according to claim 48; (ii) carrying out nucleic acid hybridisation or nucleic acid amplification or nucleic acid hybridization plus amplification and detecting the presence or absence of all representatives of *Salmonella enterica* subspecies.

20. (Amended) The method according to claim 18, wherein said amplification is carried out by a polymerase chain reaction (PCR).

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21. (Amended) The method according to claim 18, wherein differences between the genomic DNA and/or RNA of the bacteria to be detected and of the bacteria that are not to be detected are determined at at least one nucleotide position in the region of the isolated nucleic acid molecules and representatives of a group of bacteria of the *Salmonella* genus are detected.

22. (Amended) The nucleic acid molecule according to claim 10, wherein each nucleic acid sequence contains 15 to 30 nucleotides.

Sub E4
D9
24. (Amended) The set of isolated nucleic acid molecules according to claim 7, wherein said isolated nucleic acid molecules are modified or labelled nucleic acid molecule in

Sub E4 → which up to 20% of the nucleotides of at least 10 successive nucleotides of its nucleotide chain are nucleotides that do not occur naturally in bacteria.

25. (Amended) The set of isolated nucleic acid molecules according to claim 14, wherein said isolated nucleic acid molecules are modified or labelled or additionally modified or labelled nucleic acid molecule that comprises, in a manner known *per se* for analytical detection processes, one or more radioactive groups, coloured groups, fluorescent groups, groups for immobilisation on a solid phase, groups for an indirect or direct enzyme reaction.

D9
concluded
26. (Amended) The set of isolated nucleic acid molecules according to claim 7, wherein said isolated nucleic acid molecules are modified or labelled or additionally modified or labelled nucleic acid molecule that comprises, in a manner known *per se* for analytical detection processes, one or more radioactive groups, coloured groups, fluorescent groups, groups for immobilisation on a solid phase, groups for an indirect or direct reaction using antibodies, antigens, enzymes or substances having an affinity for enzymes or enzyme complexes.

Kindly add new claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents to read as follows:

Sub E5 →
- -28. (New) A set of isolated nucleic acid molecules comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10, wherein said 10 contiguous nucleotides are at 100% or at least 80% homologous to a nucleic acid sequence selected from the group consisting SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and said nucleic acid sequences allows the detection of all representatives of *Salmonella enterica* subsp. *enterica*, *salamae*, *arizonae*,
D10

diarizonae, houtenae, bongori and indica by means of nucleic acid hybridisation or amplification.

Sub E5
29. (New) The set of isolated nucleic acid molecules according to claim 28, wherein each nucleic acid sequence contains 10 to 250 nucleotides.

30. (New) The set of isolated nucleic acid molecules according to claim 28, wherein each nucleic acid sequence contains 15 to 30 nucleotides.

31. (New) The set of isolated nucleic acid molecules according to claim 28, wherein each isolated nucleic acid molecule is single-stranded or has a complementary strand.

32. (New) A set of isolated nucleic acid molecules comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and, wherein said 10 contiguous nucleotides are at 100% or at least 80% homologous to a nucleic acid sequence selected from the group consisting SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and said nucleic acid sequences allows the detection of all representatives of *Salmonella enterica* subsp. *enterica*, *salamae*, *arizonae*, *diarizonae*, *houtenae*, *bongori* and *indica* by means of nucleic acid hybridisation or amplification.

33. (New) The set of isolated nucleic acid molecules according to claim 32, wherein each nucleic acid sequence contains 10 to 250 nucleotides.

34. (New) The set of isolated nucleic acid molecules according to claim 32, wherein each nucleic acid sequence contains 15 to 30 nucleotides.

35. (New) The set of isolated nucleic acid molecules according to claim 32, wherein each isolated nucleic acid molecule is single-stranded or has a complementary strand.

Sub 15
36. (New) A set of isolated nucleic acid molecules comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10, wherein said 10 contiguous nucleotides are identical to said set of isolated nucleic acid molecules.

37. (New) The set of isolated nucleic acid molecules according to claim 36, wherein each nucleic acid sequence contains 10 to 250 nucleotides.

38. (New) The set of isolated nucleic acid molecules according to claim 36, wherein each nucleic acid sequence contains 15 to 30 nucleotides.

39. (New) The set of isolated nucleic acid molecules according to claim 36, wherein each isolated nucleic acid molecule is single-stranded or has a complementary strand.

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40. (New) A set of isolated nucleic acid molecules comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10, wherein said 10 contiguous nucleotides differ from said set of isolated nucleic acid molecules in not more than one nucleotide.

41. (New) The set of isolated nucleic acid molecules according to claim 40, wherein each nucleic acid sequence contains 10 to 250 nucleotides.

Sub E5 → 42. (New) The set of isolated nucleic acid molecules according to claim 40, wherein each nucleic acid sequence contains 15 to 30 nucleotides.

43. (New) The set of isolated nucleic acid molecules according to claim 40, wherein each isolated nucleic acid molecule is single-stranded or has a complementary strand.

44. (New) A set of isolated nucleic acid molecules comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10, wherein said 10 contiguous nucleotides differ from said set of isolated nucleic acid molecules in not more than two nucleotides.

45. (New) The set of isolated nucleic acid molecules according to claim 44, wherein each nucleic acid sequence contains 10 to 250 nucleotides.

46. (New) The set of isolated nucleic acid molecules according to claim 44, wherein each nucleic acid sequence contains 15 to 30 nucleotides.

47. (New) The set of isolated nucleic acid molecules according to claim 44, wherein each isolated nucleic acid molecule is single-stranded or has a complementary strand.

Sub E6 →
D10
concord
48. (New) A kit comprising: (i) one or more nucleic acid molecules selected from the group consisting of a set of isolated nucleic acid molecules comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10 and the complement of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9 and SEQ ID NO: 10, and (ii) optionally substances for analytical detection processes. - -